

## **Medical Control Guideline: PERFUSION STATUS**

### **PRINCIPLES:**

1. Perfusion status is determined by a combination of parameters that includes heart rate, blood pressure, tissue color and mentation. No one parameter alone can be used to determine perfusion status.
2. Adequate perfusion is defined as adequate circulation of blood through organs and tissues, manifested by normal pulse, tissue color, level of consciousness and blood pressure.
3. Poor perfusion is defined as inadequate circulation of blood through organs and tissues manifested by vital sign abnormalities and/or signs and symptoms of organ dysfunction.
4. Patients with poor perfusion that are unresponsive to initial fluid resuscitation are in shock.

### **GUIDELINES:**

1. EMS providers should evaluate for the following signs and use clinical judgement to determine poor perfusion status, which may include but not limited to one or more of the following findings:
  - a. Bradycardia, tachycardia and/or poor pulse quality (weak/thready)
  - b. Altered mental status (including anxiety, restlessness, lethargy, combative behavior)
  - c. Adult systolic blood pressure (SBP) < 90mmHg, pediatric SBP < 70mmHg
  - d. Delayed capillary refill time ( > 2 seconds) and/or changes in tissue color including pallor, cyanosis or mottling